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**Notice of Allowability**

Application No.

10/849,287

Examiner

Brian M. Healy

Applicant(s)

SORIN ET AL.

Art Unit

2883

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the application filed 05/18/2004.
2. ☒ The allowed claim(s) is/are 1-26.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 07062004
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

**BRIAN HEALY**  
**PRIMARY EXAMINER**  
**ART UNIT ~~2883~~ 2883**

## **DETAILED ACTION**

### ***Allowable Subject Matter***

The following is an examiner's statement of reasons for allowance: Lee et. al., U.S. Patent Application Publication No. US 2003/0142978A1 (Figs.1-6) an optical fiber wavelength division multiplexer optical network with two simultaneous broadband sources of different operating ranges (A and B band) 402,405, 203,204 which are switched to minimize optical loss and maximize fault recovery between optical transmitter/receivers 101,104,102,105,103,106,110 routed through a distribution node 115 to plural subscribers 122,123,124. Lee et. al. 978' does not teach or suggest the claimed multiple wavelength sources wherein the multiple wavelength light sources generate a series of four or more pulses of light in the first broad band of wavelengths, where each pulse of light in that series has a different center wavelength and series of pulses of light in the first broad band wavelengths repeat at a channel data rate of an optical receiver at a subscriber's location. This limitation is used in conjunction with a second broadband light source supplies a second broad band of wavelengths to a multiplexer/demultiplexer in a first passive optical network wherein the multiplexer/demultiplexer in a first passive optical network wherein the WMD supplies a spectral slice of the second broad band of wavelengths to a plurality of optical transmitters to wavelength lock an operating wavelength of that transmitter to the wavelength of the injected spectral splice. These limitations are recited in claims 1-6 (See dependent claims for the specifics of the dependent claims) In addition, neither Lee et. al. 978' or any other of the references of record teaches or suggests the claimed

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apparatus and method which utilize a multiple wavelength light source containing a depolarization device and a sequence generator, the multiple wavelength light source to generate a light signal that contains a series of multiple wavelengths, where each wavelength has it's own center wavelength, and only one center wavelength is present in the light signal at a specific point in time and the depolarization device to cause each wavelength in the light signal to have multiple polarization states and a data modulator to data modulate the light signal independent of the light signal having any particular polarization characteristic, wherein the sequence generator to generates signals to properly synchronize each wavelength in the light signal with the data modulator. These limitations are recited in claims 7-17 and 26 (See dependent claims for the specific additionally recited limitations). Also neither Lee et. al. 978' or any of the other recited references of record teaches or suggests the claimed method and apparatus comprising: generating a modulated optical bit stream that is wave division multiplexed and time division multiplexed where the modulated optical bit stream is modulated at a time division multiplexing rate of at least three times a channel data rate of an optical receiver at a subscriber's location; routing the modulated optical bit stream to two or more passive optical networks and controlling the polarization characteristics of the light in the modulated optical bit stream to data modulate the modulated optical data stream independent of the light having any particular polarization characteristic. These limitations are recited in claims 18-25 (See dependent claims for the specific additionally recited limitations).

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

A copy of PTO-1449 will be included in this office action.

The following references are also cited by the Examiner as being pertinent prior art: Shin et. al., U.S. Patent Application Publication No. US 2005/0152696A1 (Figs.1-5) and Jung et. al., U.S. Patent Application Publication No. US 2005/0074240A1 (Figs.1-5B).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian M. Healy whose telephone number is (571)272-2347. The examiner can normally be reached on Compressed. Schedule Tues-Thurs. 7AM-4:30PM

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank Font can be reached on (571)272-2415. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**BRIAN M. HEALY**

**PRIMARY EXAMINER**

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**BRIAN HEALY  
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ART UNIT ~~284~~ 2883**